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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/734,097

12/11/2000

Graciela Jimenez

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03768/931

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7590

11/19/2003

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EXAMINER

FORTUNA, JOSE A

ART UNIT PAPER NUMBER

1731

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/734,097

Applicant(s)

JIMENEZ ET AL.

Examiner

José A Fortuna

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson in US Patent No. 4,619,734, (cited in the Information Disclosure Statement of paper no. 3), further evidenced by Kenaga et al., US Patent No. 3,293,114 and "Expancel Microspheres in paper," Technical Bulletin No.13, (cited in Information Disclosure Statement of paper no. 3).

Regarding Claims 1-4, 11-12 and 16, Andersson teaches a tissue paper having 1 to 10% by weight of expandable Microspheres, see abstract. Andersson teaches also that the Microspheres are added at the wet of the papermaking, see column 3, lines 8-47 and in the same lines he teaches that the tissue has increased bulk. Andersson teaches that multi-layered and single-layered tissues can be made using the Microspheres, see column 6, lines 38-45, but only

exemplifies a three layer product. The bulk, of the exemplified products, is usually greater than 4 cm^3/g , (after conversion). However, one of ordinary skill in the art would recognize that the bulk of a single layered product would be less than a multilayered product for the same raw materials and papermaking conditions and that the bulk can be adjusted to required level(s) if so desired. Also, Andersson is silent with respect to the opacity of the paper. However, Kenaga et al. and Technical Bulletin No.13, teach that the use of expandable Microspheres increases the opacity of the paper, see Kenaga et al. column 1, lines 30-32 and Technical Bulletin No.13, page 4, column 1, lines 1-3. Therefore, the tissues taught by Andersson would inherently have an increased opacity in the range as claimed, since the same Microspheres and the same range of addition is taught by Andersson. Regarding Claims 5 and 13, Andersson explicitly teaches tissues with grammage between 25 to 30 g/m^2 , see Tables I and II in columns 5 and 6. Regarding Claims 6 and 14, Andersson does not explicitly teach tissues with grammage within the claimed range, but as discussed above he only exemplifies three-layered tissues. One of ordinary skill in the art would recognize that the grammage of single layered tissue would be less than a three layer one and it is also well known that single layered tissues have grammage within the claimed range, see for example US Patent No. 5,129,988 to Farrington, Jr. which is cited in Information Disclosure Statement of paper no. 3. Therefore, the single tissue product suggested by Andersson would have grammage within the claimed range or at least the minor modification(s) to obtain products within the claimed range would have been obvious to one of ordinary skill in the art. Regarding Claims 7-8, Andersson teaches the use of hardwood and softwood fibers, see column 3, lines 8-47. Regarding claim 9 and 15, Andersson is silent with respect to the use of a retention aid. However, Technical Bulletin No.13, clearly indicates that it is necessary to add a retention

aid in order to reach sufficient retention of Microspheres in fine paper and therefore, the use of a retention would have been obvious to one of ordinary skill in the art in order to increase the retention of the particles within the paper matrix. Regarding Claims 10 and 17, Andersson does not teach using 0.5% of the micro particles. However, optimizing the addition range would have been obvious to one of ordinary skill in the art absent a showing of unexpected results. Note that the main concern of Andersson is obtaining bulk in the tissue and one of ordinary skill in the art would recognize that if the opacity is the most important variable then the addition level(s) would be less than for just obtaining a bulkier web. Note also that if a retention aid were added as suggested by Technical Bulletin No.13, it would lower the addition levels to obtain a sheet with predetermined levels of the Microspheres.


Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Opaque Tissues."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A Fortuna whose telephone number is 703-305-7498. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0662.


José A Fortuna
Primary Examiner

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